#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| Application No.: | Patent No.: |
|------------------|-------------|
| Filed:           | Issue Date: |
| Title:           |             |

Commissioner for Patents Washington, D.C. 20231

# POWER OF ATTORNEY BY ASSIGNEE OF ENTIRE INTEREST (REVOCATION OF PRIOR POWERS)

As assignee of record of each of the patents listed in the table of attachment A,

## REVOCATION OF PRIOR POWERS OF ATTORNEY

all powers of attorney previously given in each of the listed patents are hereby revoked, and

## **NEW POWER OF ATTORNEY**

the following attorneys/agents are hereby appointed to prosecute this patent/application and to transact all business in the Patent and Trademark Office connected therewith: I hereby appoint all attorneys of Thomas, Kayden, Horstemeyer & Risley, LLP, who are listed under the USPTO Customer Number shown below as the attorneys to prosecute this patent/application and to transact all business in the United States Patent and Trademark Office connected therewith, recognizing that the specific attorneys listed under that Customer Number may be changed from time to time at the sole discretion of Thomas, Kayden, Horstemeyer & Risley, LLP, and request that all correspondence about the application be addressed to the address filed under the same USPTO Customer Number:

# 15650

Patent Trademark Office

Please direct all future correspondence and telephone calls to:

Scott A. Horstemeyer, Reg. No. 34,183 THOMAS, KAYDEN, HORSTEMEYER & RISLEY, L.L.P. 400 Interstate North Parkway Atlanta, Georgia 30339 770-933-9500

### ASSIGNEE OF ENTIRE INTEREST

#### **BROADCOM CORPORATION**

5300 California Avenue Irvine, California 92617-3038

## ASSIGNEE CERTIFICATION

The certification under 37 C.F.R. §3.73(b) establishing the right of assignee to take action is attached hereto along with documentation evidencing same. Further, in my official position with Broadcom Corporation, I am authorized to sign documents and otherwise act on its behalf in connection with the management and handling of patent applications and other intellectual property matters.

Date: 9/12/11

Dee Henderson

Director - Intellectual Property Administration

Broadcom Corporation

# ATTACHMENT A

| No. | Patent No. | BD No.     | Patent Title   | Issue Date | Assignment to BD (Reel/Frame) |
|-----|------------|------------|--|------------|-------------------------------|
| 1   | 7,054,805  | BU2689     | METHOD AND<br>SYSTEM FOR<br>ALLOCATING<br>MEMORY DURING<br>ENCODING OF A<br>DATASTREAM                   | 5/30/2006  | 013991/0706                   |
| 2   | 7,301,902  | BU2775     | GENERIC ON-CHIP<br>HOMING AND<br>RESIDENT, REAL-<br>TIME BIT EXACT<br>TESTS                              | 11/27/2007 | 014060/0087                   |
| 3   | 7,680,042  | BU2775D1C1 | GENERIC ON-CHIP<br>HOMING AND<br>RESIDENT, REAL-<br>TIME BIT EXACT<br>TESTS                              | 3/16/2010  | 022588/0679                   |
| 4   | 7,149,305  | BU2900     | COMBINED SIDETONE AND HYBRID BALANCE   | 12/12/2006 | 014129/0728                   |
| 5   | 7,528,889  | BU2922C1   | SYSTEM, METHOD,<br>AND APPARATUS<br>FOR DISPLAYING<br>STREAMS WITH<br>DYNAMICALLY<br>CHANGING<br>FORMATS | 05/05/2009 | 013980/0291                   |
| 6   | 7,190,775  | BU2923     | HIGH QUALITY<br>AUDIO<br>CONFERENCING<br>WITH ADAPTIVE<br>BEAMFORMING                                    | 3/13/2007  | 014331/0522                   |
| 7   | 7,116,742  | BU1225C1   | TIMING RECOVERY<br>SYTEM FOR A<br>MULTI-PAIR GIGABIT<br>TRANSCEIVER                                      | 10/3/2006  | 016450/0334                   |
| 8   | 7,844,019  | BU1225C2   | TIMING RECOVERY<br>SYTEM FOR A<br>MULTI-PAIR GIGABIT<br>TRANSCEIVER                                      | 10/03/2006 | 016450/0334                   |

| No. | Patent No. | BD No.   | Patent Title  | Issue Date | Assignment to BD (Reel/Frame) |
|-----|------------|----------|---|------------|-------------------------------|
| 9   | 7,535,836  | BU2746   | METHOD AND<br>SYSTEM TO<br>PROVIDE WORD-<br>LEVEL FLOW<br>CONTROL USING<br>SPARE LINK<br>BANDWIDTH      | 5/19/2009  | 0014423/0227                  |
| 10  | 7,542,465  | BU2788   | OPTIMIZATION OF<br>DECODER<br>INSTANCE MEMORY<br>CONSUMED BY THE<br>JITTER CONTROL<br>MODULE            | 6/2/2009   | 013755/0867                   |
| 11  | 7,602,815  | BU2954   | USING NETWORK<br>TIME PROTOCOL IN<br>VOICE OVER<br>PACKET<br>TRANSMISSION                               | 10/13/2009 | 014199/0933                   |
| 12  | 7,382,924  | BU3141   | PIXEL REORDERING<br>AND SELECTION<br>LOGIC  | 6/3/2008   | 014252/0094                   |
| 13  | 7,562,024  | BU3142   | STORING<br>MACROBLOCKS<br>FOR<br>CONCATENATED<br>FRAMES   | 4/28/2009  | 015234/0736                   |
| 14  | 7,970,262  | BU3149C1 | BUFFER DESCRIPTOR STRUCTURES FOR COMMUNICATION BETWEEN DECODER AND DISPLAY MANAGER                      | 06/28/2011 | 014217/0172                   |
| 15  | 7,227,587  | BU2860   | SYSTEM AND METHOD FOR THREE DIMENSIONAL COMB FILTERING  | 6/5/2007   | 014716/0211                   |
| 16  | 7,113,221  | BU2862   | METHOD AND<br>SYSTEM FOR<br>CONVERTING<br>INTERLACED<br>FORMATTED VIDEO<br>TO PROGRESSIVE<br>SCAN VIDEO | 9/26/2006  | 014390/0879                   |

|     |            |          |  |            | 1                             |
|-----|------------|----------|--|------------|-------------------------------|
| No. | Patent No. | BD No.   | Patent Title   | Issue Date | Assignment to BD (Reel/Frame) |
| 17  | 7,280,155  | BU2862C1 | METHOD AND<br>SYSTEM FOR<br>CONVERTING<br>INTERLACED<br>FORMATTED VIDEO<br>TO PROGRESSIVE<br>SCAN VIDEO          | 10/09/2007 | 014390/0879                   |
| 18  | 7,307,669  | BU2922   | SYSTEM, METHOD,<br>AND APPARATUS<br>FOR DISPLAYING<br>STREAMS WITH<br>DYNAMICALLY<br>CHANGING<br>FORMATS         | 12/11/2007 | 013980/0291                   |
| 19  | 7,574,059  | BU2931   | SYSTEM, METHOD,<br>AND APPARATUS<br>FOR PROVIDING<br>MASSIVELY SCALED<br>DOWN VIDEO USING<br>ICONIFICATION       | 8/11/2009  | 016291/0584                   |
| 20  | 7,865,361  | BU2958   | VOICE QUALITY<br>ANALYSIS<br>TECHNIQUE   | 1/4/2011   | 014147/0255                   |
| 21  | 7,193,656  | BU3140.1 | LINE ADDRESS<br>COMPUTER FOR<br>PROVIDING<br>COEFFICIENTS TO A<br>CHROMA FILTER                                  | 3/20/2007  | 014381/0066                   |
| 22  | 7,301,582  | BU3140.2 | LINE ADDRESS COMPUTER FOR PROVIDING LINE ADDRESSES IN MULTIPLE CONTEXTS FOR INTERLACED TO PROGRESSIVE CONVERSION | 11/27/2007 | 014375/0019                   |
| 23  | 7,702,021  | BU3159   | DECODING OF<br>DIGITAL VIDEO<br>STANDARD<br>MATERIAL DURING<br>VARIABLE LENGTH<br>DECODING                       | 4/20/2010  | 014757/0887                   |

| No. | Patent No. | BD No.    | Patent Title   | Issue Date | Assignment to BD<br>(Reel/Frame) |
|-----|------------|-----------|--|------------|----------------------------------|
| 24  | 7,333,714  | BU3338    | METHOD AND<br>SYSTEM FOR<br>PERFORMING<br>REVERSE PLAY OF<br>SD MPEG VIDEO                                       | 2/19/2008  | 014647/0021                      |
| 25  | 7,653,135  | BU3378    | MPEG FIELD DATA-<br>DRIVEN DISPLAY   | 1/26/2010  | 016297/0268                      |
| 26  | 7,689,852  | BU3271    | METHOD AND<br>SYSTEM FOR<br>PROVIDING POWER<br>MANAGEMENT FOR<br>AN INTEGRATED<br>GIGABIT ETHERNET<br>CONTROLLER | 3/30/2010  | 015115/0655                      |
| 27  | 7,565,462  | BU2007.1C | MEMORY ACCESS ENGINE HAVING MULTI-LEVEL COMMAND STRUCTURE  | 07/21/2009 | 014295/0066                      |
| 28  | 7,920,624  | BU2017.1  | INVERSE<br>QUANTIZER<br>SUPPORTING<br>MULTIPLE<br>DECODING<br>PROCESSES  | 4/5/2011   | 014309/0949                      |
| 29  | 7,630,566  | BU2065    | METHOD AND APPARATUS FOR IMPROVED ESTIMATION AND COMPENSATION IN DIGITAL VIDEO COMPRESSION AND DECOMPRESSION     | 12/8/2009  | 013424/0660                      |
| 30  | 7,111,127  | BU3059    | SYSTEM FOR<br>SUPPORTING<br>UNLIMITED<br>CONSECUTIVE<br>DATA STORES INTO<br>A CACHE MEMORY                       | 9/19/2006  | 014558/0363                      |

| No. | Patent No. | BD No.   | Patent Title  | Issue Date | Assignment to BD |
|-----|------------|----------|---|------------|------------------|
|     |            |          |   |            | (Reel/Frame)     |
| 31  | 7,472,057  | BU3098   | DETECTOR FOR<br>USE IN VOICE<br>COMMUNICATIONS<br>SYSTEMS                                       | 12/30/2008 | 014340/0616      |
| 32  | 7,133,046  | BU3148   | SYSTEM, METHOD,<br>AND APPARATUS<br>FOR DISPLAY<br>MANAGER                                      | 11/7/2006  | 014217/0180      |
| 33  | 7,843,825  | BU5783   | METHOD AND<br>SYSTEM FOR<br>PACKET RATE<br>SHAPING  | 11/30/2010 | 020377/0001      |
| 34  | 7,869,779  | BU5868   | METHOD AND<br>SYSTEM FOR<br>PROCESSING<br>CHANNELS IN A FM<br>COMMUNICATION<br>SYSTEM           | 1/11/2011  | 019536/0395      |
| 35  | 7,873,332  | BU5915   | METHOD AND<br>SYSTEM FOR<br>MITIGATING A<br>VOLTAGE<br>STANDING WAVE<br>RATIO                   | 1/18/2011  | 018886/0616      |
| 36  | 6,990,195  | BU1353   | VOICE AND DATA<br>EXCHANGE OVER A<br>PACKET BASED<br>NETWORK WITH<br>RESOURCE<br>MANAGEMENT     | 1/24/2006  | 011160/0310      |
| 37  | 6,795,088  | BU1574.1 | METHOD AND<br>SYSTEM FOR MORE<br>EFFICIENTLY<br>UTILIZING<br>PROCESSORS OF A<br>GRAPHICS SYSTEM | 9/21/2004  | 012811/0558      |

| No. | Patent No. | BD No.   | Patent Title  | Issue Date | Assignment to BD (Reel/Frame) |
|-----|------------|----------|---|------------|-------------------------------|
| 38  | 6,621,362  | BU1815   | VARACTOR BASED<br>DIFFERENTIAL VCO<br>BAND SWITCHING      | 9/16/2003  | 011835/0144                   |
| 39  | 6,927,606  | BU1883D1 | Low voltage<br>differential to single-<br>ended converter |            | 011743/0686                   |